

ABSTRACT

Telephone networks require an expensive physical infrastructure of transmission lines or cables. Building such an infrastructure may not be economically feasible in remote or sparsely populated areas which lack the necessary wealth or demand. Wireless connections provide an inexpensive alternative, but attempts to date using communication satellites and cellular systems, all have serious shortcomings. The invention provides a cost-effective system which interconnects a standard telephony device with the PSTN via a transparent, wireless link, the wireless link being provided at respective ends, by a stand-alone communication interface which includes a convertor for receiving audio signals, including in-band DTMF signals, from a telephony device and converting those received signals into digital data; and a point to point wireless transmitter which receives the digital data and transmits it at a radio frequency via an external antenna.

1. A system for providing a wireless link between a telephony device and a PSTN, comprising:
a. a stand-alone communication interface;
b. a point to point wireless transmitter;
c. a convertor for receiving audio signals, including in-band DTMF signals, from a telephony device and converting those received signals into digital data;
d. a point to point wireless transmitter which receives the digital data and transmits it at a radio frequency via an external antenna.